

Brucellosis

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What is brucellosis?

Brucellosis is a disease that is caused by the bacteria (germ) *Brucella*. These bacteria mainly infect farm animals such as sheep, goats, cattle and pigs. However, other types of animals, such as deer, buffalo, wild boar, and dogs and humans can also become infected. It is very rare in the United States including Massachusetts.

How do people get brucellosis?

In the U.S., most people get it by eating or drinking unpasteurized milk, cheese or ice cream that came from infected animals. People may also become infected with *Brucella* if they have a cut in their skin and come into contact with an infected animal's internal tissues, blood, urine or other fluids. People caring for an infected animal while it is giving birth are especially at risk. It is not easily transmitted from person to person.

Rarely, the bacteria can spread in the air. People working as farmers, veterinarians, laboratory technicians and slaughterhouse workers may be at risk for this type of exposure.

What are the symptoms of brucellosis?

It has a wide range of symptoms. Some of these are similar to the flu including fever, chills, sweats, headaches, muscle aches, joint pains, back pain and physical weakness. It can also lead to long lasting symptoms that include recurrent fevers, joint pain and fatigue.

How soon do symptoms of brucellosis appear?

Symptoms can appear anywhere from 5 to 60 days after exposure to the bacteria but most people start to show symptoms about 3 to 4 weeks after exposure.

How is brucellosis diagnosed?

It is diagnosed by finding the germ through laboratory testing of blood, bone marrow and other tissues.

How is brucellosis treated?

It is treated by taking antibiotics for up to 6 weeks to prevent re-occurring infection. Recovery may take a few weeks to several months. Death rarely occurs.

Is there a vaccine (shot) for brucellosis?

There is no vaccine against brucellosis currently available for humans; however, there is a vaccine available for animals.

Where does brucellosis occur?

It is commonly found in countries outside of the United States, particularly those in the Mediterranean Basin (Portugal, Spain, Southern France, Italy, Greece, Turkey and North Africa), South and Central America, Eastern Europe, Asia, Africa, the Caribbean and the Middle East.



How can brucellosis be prevented?

People should avoid drinking unpasteurized milk or eating unpasteurized cheese or ice cream, particularly if it was made in a country where brucellosis is still common. If you are not sure whether the dairy product is pasteurized, do not eat it.

- Veterinarians and farmers should wear gloves when handling sick or dead animals or when assisting an animal giving birth.
- Hunters should wear gloves when skinning and dressing wild animals.
- Laboratory workers should handle all specimens using appropriate safety procedures.

Can *Brucella* be used for bioterrorism?

Yes. Bioterrorism is the use of any biological organism to intentionally hurt people or create fear. The Centers for Disease Control and Prevention lists *Brucella* as a possible bioterrorism agent; however, it has never been successfully used in this manner.

Where can I get more information?

- Your doctor, nurse or clinic, or your local board of health (listed in the phone book under local government)
- The Massachusetts Department of Public Health (MDPH), Division of Epidemiology and Immunization at (617) 983-6800 or toll-free at (888) 658-2850, or on the MDPH website at www.mass.gov/dph
- The Massachusetts Department of Agricultural Resources, Division of Animal Health at (617) 626-1786 or on the MDAR website at www.mass.gov/agr/
- The Centers for Disease Control and Prevention (CDC) website at www.bt.cdc.gov/

